

Regional Low Carbon Fuel Standard Program

An Overview of the Northeast and Mid-Atlantic States Initiative

What is a Low Carbon Fuel Standard?

Transportation fuels account for approximately 30% of Northeast and Mid-Atlantic greenhouse gas (GHG) emissions. A Low Carbon Fuel Standard (LCFS) is a program designed to lower the GHG emissions from these fuels, and potentially fuels used for space heating as well. The LCFS is a market-based program to address the carbon content of fuels by lowering the carbon intensity (the amount of GHGs released per unit of energy produced) of the fuels used in the region. By analyzing the amount of greenhouse gas emissions released during the fuels' full lifecycle, including production, transport, and consumption, the fuels can be measured and compared with respect to their carbon intensity.

Program Background:

The nation's first LCFS program was initiated by Governor Schwarzenegger of California in 2007, and similar programs are being considered in Oregon, Washington, and ten Midwestern states. Since most Northeast and Mid-Atlantic states have statutory obligations or other commitments to achieve a significant reduction in greenhouse gas emissions, or are otherwise taking steps to reduce emissions through energy efficiency, renewable energy, and transportation programs, the region has taken a number of steps towards creating a LCFS program as a means for combating climate change.

- In July 2008, Governor Deval L. Patrick of Massachusetts sent letters to the governors of the Northeast and Mid-Atlantic states, proposing that the region evaluate the possibility of implementing a LCFS. In addition to Massachusetts, participating states are New York, New Jersey, Vermont, New Hampshire, Maine, Connecticut, Rhode Island, Pennsylvania, Delaware, and Maryland.
- In response to Governor Patrick's proposal, a letter of intent was signed by environmental and energy agency commissioners in the 11 states in December 2008, committing the states to examining low carbon fuel supply options and developing a framework for a regional LCFS.
- In July 2009, the Northeast States Center for a Clean Air Future (NESCCAF) completed a study conducted on behalf of the states, exploring the possibility of implementing a regional LCFS.
- In December 2009, the Governors of the 11 states signed a Memorandum of Understanding, which affirms each state's commitment to developing a program framework by 2011.

Commissioners' Letter of Intent: http://www.mass.gov/Eoeea/docs/pr_lcfs_attach.pdf
NESCAAF LCFS Report: <http://www.nescaum.org/documents/lcfs-report-final-200909-rev-final.pdf>

How Will the Program Work?

The LCFS will require regional fuel suppliers to demonstrate that the average carbon content of the fuel they deliver is reduced over time. A credit trading system will provide opportunities to control costs by allowing a supplier to purchase credits from low carbon fuels and average them with higher carbon fuels delivered to customers. Rather than imposing restrictions on specific fuel types, this approach allows fuel providers to choose among different fuels, based on cost effectiveness and environmental impact, in order to meet the carbon intensity reduction targets set by the program. This policy will allow the fuel industry flexibility to determine when and where new infrastructure can be introduced most efficiently, such as use of electric vehicles or additional supplies of liquid low carbon fuels.

A regional LCFS program is prudent and efficient given the interconnected nature of the fuel distribution system in the Northeast and Mid-Atlantic region. The 11 participating states include all 10 member states of the Regional Greenhouse Gas Initiative (RGGI), plus Pennsylvania. These states have demonstrated the practicality of regional emissions reduction programs with RGGI, which limits greenhouse gas emissions from power plants. Over the course of 2010, the states will work together to analyze the economic and environmental effects of a LCFS program and will develop a framework and model rule. This process will include opportunities for stakeholders to review and comment as the effort proceeds.

What are the Benefits of an LCFS Program?

In addition to reducing greenhouse gas emissions in the Northeast and Mid-Atlantic states, the LCFS program will provide opportunities for greater use of low-carbon fuels in the future. The program will provide an incentive to commercialize new fuel technologies, encourage the development of infrastructure to produce and distribute low-carbon fuels, and support the use of more efficient vehicles. The development of alternative fuels will stimulate local economies, while reducing the impact of potentially volatile conventional fuel prices and dependence on foreign oil.

Alternative fuels that may have potential to reduce the carbon intensity of fuel in order to meet LCFS program requirements include but are not limited to electricity (for plug-in hybrid and electric vehicles) and a variety of advanced biofuels, such as those from non-food crops (such as cellulosic ethanol). Advanced biofuels are expected to have lower lifecycle carbon emissions and be less likely to cause a diversion of food crops to fuel use than some biofuels on the market today.

Where to go for more information:

<http://www.nescaum.org/topics/low-carbon-fuels>